

FOSSIL POLYPORES FROM IDAHO

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In June, 1946, we spent a day searching for fossil plant remains in the late Tertiary deposits in southwestern Idaho. Our primary quest in this region was for petrified evergreen cones that have occasionally turned up, although only in such quantity as to whet the appetite of collectors. The focal point of that day's collecting was approximately 10.5 miles south of Bruneau and .5 mile east of state highway No. 51 which runs south from Mountain Home, Idaho, through Owyhee County into Nevada. In the course of the day one member of our party, Mr. J. M. Dodds, a County Commissioner, of Boise, discovered a fine specimen of a petrified polypore. More recently, Mr. S. H. Osgood, of Rupert, Idaho, has sent us a fragment of another specimen. Although both of our specimens seem to be clearly referable to the fossil *Fomes idaboensis* Brown (Brown, '40), in view of the great rarity of fossil polypores a brief record of the specimens seems worth while.

This part of Idaho is well known to local mineral collectors for its abundance of fossil wood, as well as the occasional cones. Most of these fossils are weathering out of a loosely consolidated, fine white sandstone which is overlain by a brownish-buff sandstone of a harder texture likewise yielding petrified plant remains. Overlying the productive plant beds is a horizon which yields an abundance of well-preserved fish jaws (*Mylocyprinus robustus* Leidy). The only stratigraphical study of the beds in this region is that of Piper's ('24), and the horizon from which our fossils were obtained was apparently in his group No. 8 which is described as "Lake sediments, semi-consolidated, white, gray, and buff sandstones and sandy shales, volcanic ash; . . .". These beds have been considered to be of Pliocene age although it is possible that they may be of later origin. In a recent letter (February 20, 1947) Dr. Bobb Schaeffer has informed us of a collection of *Mylocyprinus robustus* fossil fish pharyngeals in the American Museum that were collected "from an area in southwest Idaho between 'Catherine and Sinker Creeks.' This particular locality is considered to be Pleistocene and as this genus has not previously been reported from older formations I am wondering if your horizon might not also be referable to that period."

POLYPORACEAE

Fomes idaboensis Brown.—The Dodds specimen is a nearly complete sporophore, only a small portion of one side having been lost. As seen in top view (fig. 1) it measures 10 x 11 cm. It bears but one layer of pores, which are 12 to 15 mm. long and number approximately 720 per square cm. Judging from the portion remaining it did not attain a thickness exceeding 2 cm. The rings of growth, characteristic of the living bracket polypores, are clearly defined on the upper surface. While it is not sufficiently well preserved to reveal any significant

diagnostic characters, a longitudinal ground thin section reveals a fine filamentous structure suggesting mycelium. The specimen is preserved as No. 5000 in the collections of the Henry Shaw School of Botany.

The Osgood specimen (No. 5001) is a fragment of an appreciably larger polypore that was probably about 15 cm. in diameter. The pores of this specimen attain a length of slightly more than 20 mm.

The primary interest in these fossils lies in their evident position in the Polyporaceae, and within this family they appear to be most closely related to the genera *Fomes* and *Polyporus*. Their general aspect is that of a *Fomes*, and because of the close resemblance to *Fomes idaboensis* we have assigned them to that species. The lack of dependable color preservation in these, as in most fossils, detracts appreciably from making an entirely dependable comparison with modern species of *Fomes* and *Polyporus*. Brown has, however, noted a rather close similarity between *F. idaboensis* and the living *F. pinicola* (Sw.) Cooke.

Only two undoubted American fossil polypores have been recorded previously. Mason ('34) has described a specimen of *Fomes applanatus* (Pers.) Gill. from the Pleistocene Tomales formation of Tomales Bay, California. Brown's specimen of *Fomes idaboensis* was collected about 5 miles north of the Bruneau locality from which our specimens were found.

We wish to thank Mr. J. M. Dodds and Mr. S. H. Osgood for kindly presenting these fossil fungi for preservation in the Henry Shaw School of Botany collections. Thanks are also due Dr. Bobb Schaeffer, The American Museum of Natural History, for identifying the fossil fish pharyngeals as being referable to *Mylocyprinus* and probably the species *robustus* of Leidy. Through the courtesy of Dr. R. W. Brown we have been able to compare our specimens with a portion of the type specimen of *Fomes idaboensis*.

REFERENCES CITED

- Brown, R. W. (1940). A bracket fungus from the late Tertiary of southwestern Idaho. Jour. Wash. Acad. Sci. 30:422-424.
 Mason, H. L. (1934). Pleistocene flora of the Tomales formation. Carneg. Inst. Wash., Publ. 415:83-179.
 Piper, A. M. (1924). Geology and water resources of the Bruneau River Basin, Owyhee County, Idaho. Idaho Bur. Min. and Geol., Moscow, Idaho. Pamphlet No. 11:1-55.

EXPLANATION OF PLATE

PLATE 13

Fomes idaboensis Brown

Fig. 1. Upper surface of the sporophore. Pores may be noted where portions of the context have broken away.

Fig. 2. Under surface.

Fig. 3. Side view showing the single layer of pores.

Fig. 4. A portion of the under surface showing the pores enlarged.

Figures 1-3 nearly natural size. Figure 4 magnified 4 times. All photographs of specimen No. 5000.